

M.S. Smith - D.N. Adams 5-1

Sea Surface Antenna
Abstract of the Disclosure

A sea surface antenna comprises a cylindrical tube of metallic material 13 on a dielectric former. The tube has a longitudinal slot shorted at each end and coupled at its midpoint to a coaxial feed. The slot is bridged by two groups of capacitances each group being distributed along a respective half of the slot. The length of the antenna is less than 0.25λ and the diameter of the antenna is less than 0.02λ , where λ is the free space wavelength at the operating frequency. The antenna is dimensioned so as to operate in an evanescent mode at a resonant frequency less than the cut-off frequency.